

AMENDMENTS TO THE CLAIMS

1 (currently amended): A monitor comprising:
a display panel for displaying video images;
5 a displaying circuit for transforming video signals
transmitted from a computer into a video image and
displaying the video image on the display panel;
a connector electrically connected to an input port of the
displaying circuit for receiving the video signals
10 transmitted from the computer; and
a self testing circuit electrically connected to the input
port of the displaying circuit, the self testing
circuit comprising:
a testing signal generator for generating a testing
15 signal to test the monitor, the testing signal
generator generating the testing signal from an
H-BLANK signal such that the testing signal and the
H-BLANK signal have substantially similar duty
cycles, wherein the testing signal generator
20 transmits the testing signal to the displaying
circuit, and the displaying circuit transforms the
testing signal into a testing image and displays
the testing image on the display panel;
a switch circuit electrically connected between an
25 output port of the testing signal generator and the
input port of the displaying circuit, for
controlling output of the testing signal; and
a detecting circuit electrically connected to a
30 controlling port of the switch circuit for
detecting whether signals are transmitted from the
computer so as to control on/off states of the switch
circuit;

wherein when the detecting circuit detects the video signals transmitted from the computer, the detecting circuit switches off the switch circuit so as to avoid the testing signal generated from the testing signal generator being transmitted to the input port of the displaying circuit, and when no video signals transmitted from the computer are detected, the detecting circuit switches on the switch circuit so as to allow the testing signal generated from the testing signal generator to be transmitted to the displaying circuit.

2 (original): The monitor of claim 1 wherein the connector is a 15 DSUB connector.

15 3 (cancelled).

4 (currently amended): A self testing circuit installed in a monitor for performing self-testing of the monitor, the monitor comprising a display panel for displaying video images, a displaying circuit for transforming video signals transmitted from a computer into a video image and displaying the video image on the display panel, and a connector electrically connected to an input port of the displaying circuit for receiving the video signals transmitted from the computer, the self testing circuit being electrically connected to the input port of the displaying circuit and comprising:
a testing signal generator for generating a testing signal to test the monitor, the testing signal generator generating the testing signal from an H-BLANK signal such that the testing signal and the H-BLANK signal have substantially similar duty cycles, wherein the testing

signal generator transmits the testing signal to the displaying circuit, and the displaying circuit transforms the testing signal into a testing image and displays the testing image on the display panel;

5 a switch circuit electrically connected between an output port of the testing signal generator and the input port of the displaying circuit, for controlling output of the testing signal; and
10 a detecting circuit electrically connected to a controlling port of the switch circuit for controlling on/off states of the switch circuit; wherein when the detecting circuit detects that the monitor is connected with the computer, the detecting circuit switches off the switch circuit so as to avoid the testing
15 signal generated from the testing signal generator being transmitted to the input port of the displaying circuit, and when the detecting circuit detects that the monitor is not connected with the computer, the detecting circuit switches on the switch circuit so as to allow the testing
20 signal generated from the testing signal generator to be transmitted to the displaying circuit.

5 (original): The self testing circuit of claim 4 wherein the video signals transmitted from the computer are IBM VGA
25 signals including an EPS1 sub signal, and the connector includes a corresponding EPS1 pin for receiving the EPS1 sub signal, and when detecting that the monitor is connected with the computer, the EPS1 pin is grounded and the detecting circuit switches off the switch circuit, and
30 when detecting that the monitor is not connected with the computer, the EPS1 pin is floated and the detecting circuit switches on the switch circuit so as to allow the testing

signal generated from the testing signal generator to be transmitted to the displaying circuit.

6 (original): The self testing circuit of claim 4 wherein the 5 controlling port of the switch circuit is a transistor, and by controlling on/off states of the transistor, the detecting circuit allows the testing signal to be transmitted to the input port of the displaying circuit or not.

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7 (cancelled).

8 (currently amended): A simulation method for simulating video signals to generate a video image on a monitor with 15 an H-BLANK signal, the monitor comprising a display panel for displaying video images, and a displaying circuit for sequentially transforming video signals transmitted from a computer into corresponding video scanning lines, the displaying circuit deciding the timing of displaying a 20 video scanning line on the display panel according to an H-BLANK a testing signal so as to form a corresponding video image out of a plurality of video scanning lines, the simulation method comprising steps of:
generating the testing signal from the H-BLANK signal by 25 adjusting the amplitude of the H-BLANK signal, the testing signal and the H-BLANK signal having substantially similar duty cycles;
detecting whether the monitor is connected with the computer; and
30 if the monitor is not connected with the computer, then adjusting the amplitude of the H-BLANK signal and transmitting the H-BLANK testing signal to the

displaying circuit so as to simulate video signals from the computer and generate corresponding video images.

9 (currently amended) : The simulation method of claim 8 wherein
5 the monitor further comprises a switch circuit and the H-BLANK testing signal is transmitted to an input port of the displaying circuit via the switch circuit, and when detecting that the monitor is connected with the computer, the switch circuit will be switched off to avoid the H-BLANK testing signal from being transmitted to the input port of the displaying circuit, and when detecting that the monitor is not connected with the computer, the switch circuit will be switched on so that the H-BLANK testing signal can be transmitted to the input port of the displaying circuit.

10 10 (currently amended) : The method of claim 8 wherein the waveform of the H-BLANK testing signal is substantially similar to the waveform of a full-white video signal so that when the H-BLANK testing signal is transmitted to the input port of the displaying circuit, the display panel displays a full-white video image.

11 11 (currently amended) : A simulation method for simulating video signals to generate a video image on a monitor with an H-BLANK signal, the monitor comprising a display panel for displaying video images, and a displaying circuit for sequentially transforming video signals transmitted from a computer into corresponding video scanning lines, the displaying circuit deciding the timing of displaying a video scanning line on the display panel according to an H-BLANK a testing signal so as to form a corresponding video

image out of a plurality of video scanning lines, the simulation method comprising steps of:

5 generating the testing signal from the H-BLANK signal by adjusting the amplitude of the H-BLANK signal, the testing signal and the H-BLANK signal having substantially similar duty cycles;

detecting whether video signals are transmitted from the computer; and

10 if no signals transmitted from the computer are detected, ~~then adjusting the amplitude of the H-BLANK signal and transmitting the H-BLANK testing signal to the displaying circuit so as to simulate video signals from the computer and generate corresponding video images.~~

15 12 (currently amended): The simulation method of claim 11 wherein the monitor further comprises a switch circuit and the H-BLANK testing signal is transmitted to an input port of the displaying circuit via the switch circuit, and when signals transmitted from the computer are detected, the switch circuit will be switched off to avoid the H-BLANK testing signal from being transmitted to the input port of the displaying circuit, and when no signals transmitted from the computer are detected, the switch circuit will be switched on so that the H-BLANK testing signal can be transmitted to the input port of the displaying circuit.

13 (currently amended): The method of claim 11 wherein the waveform of the H-BLANK testing signal is substantially similar to the waveform of a full-white video signal so that when the H-BLANK testing signal is transmitted to the input port of the displaying circuit, the display panel displays a full-white video image.